Ecosystem Influence on Goshawk (*Accipiter gentilis laingi* and *atricapillus*) Ecology and Management: Are specific ecosystem management practices required to successfully maintain healthy populations at a local or regional scale?

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Goshawk management practices at a landscape scale are based on the assumption that the basic underlying factors influencing goshawk ecology are the same. Here in British Columbia, and in the Yukon, several long-term goshawk population studies within different ecosystem types have revealed different prey, habitat thresholds and landscape area requirements. Together these studies have shown that the same landscape scale impacts (Forestry, agriculture, global warming?) on the habitats within different ecosystems are likely to have very different impacts on the goshawk population found in those ecosystems. In addition, work on goshawk morphology, indicates that the goshawks within an ecosystem may have evolved or adapted morphological characteristics on an ecosystem basis. In the short-term, the red-listed *laingi* (Queen Charlotte Goshawk*)* goshawk, on a population basis, appears as though it may be more vulnerable to the harvesting of mature forests, than the mainland *atricapillus* goshawk, in the ecosystems in which it has have been studied. However, in the long-term, the mainland goshawk may be just as vulnerable both at a local and regional scale. Work is taking place with landscape managers to try to understand what the specific ecosystem habitat thresholds are, and subsequently to understand if, and how, we can manage for this species in harvested landscapes. In addition, through habitat suitability modelling and ground truthing, we are developing an understanding of the probable role that existing protected areas, such as Gwaii Haanas National Park on Haida Gwaii, may play in determining the long-term resilience of specific goshawk populations. Finally, findings from this long-term research may also have significant implications for how we manage other species at risk.